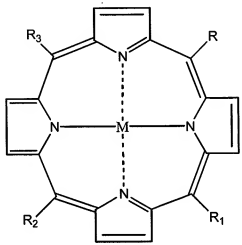
## AMENDMENTS TO THE CLAIMS

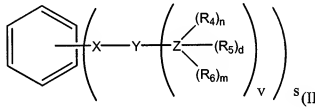
1. (Currently Amended) Compounds of general formula (I)




(I)

wherein

R is the following group of formula (II)




(II)

wherein

X is selected from the group consisting of O, S, $CH_2$, COO, $CH_2CO$, $O(CH_2)_2O$, $O(CH_2)_3O$ and N;

Z is selected from between N and $CH_2N$;

Y is selected from aliphatic groups, linear or branched, saturated or unsaturated, having from 1 to 10 carbon atoms, and phenyl, ~~possibly substituted,~~ or Y forms with Z a saturated or unsaturated heterocycle, ~~possibly substituted, comprising up to two heteroatoms selected from the group consisting of N, O and S~~ selected from the group consisting of: morpholine, piperidine, pyrimidine, piperazine, pyrrolidine, pyrroline, aniline, julolidine (2,3,6,7-tetrahydro-1H,5H-pirido[ 3,2,1-*ij*] quinoline, and substituted forms thereof;

$R_4$ and $R_5$, equal or different from each other, are selected from H and alkyl groups having from 1 to 3 carbon atoms, or they form with the Z group a saturated or unsaturated heterocycle, ~~possibly~~

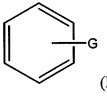
~~substituted, comprising up to two heteroatoms selected from the group consisting of N, O and S~~ selected from the group consisting of: morpholine, piperidine, pyrimidine, piperazine, pyrrolidine, pyrroline, aniline, julolidine (2,3,6,7-tetrahydro-1H,5H-pirido[ 3,2,1-*ij*] quinoline), and substituted forms thereof;

$R_6$ is selected from H and aliphatic groups, linear or branched, saturated or unsaturated, having from 1 to 5 carbon atoms, ~~possibly substituted with alkylamine or alkylammonium groups having alkyl chains comprising from 1 to 5 carbon atoms,~~ or ~~forming~~ comprising a saturated heterocycle selected from the group consisting of: morpholine, piperidine, piperazine, pyrrolidine, and substituted forms thereof ~~comprising up to two heteroatoms selected from between O and N~~;

d, m, and n, equal of different from each other, are selected from 0 and 1;

v and s, equal or different from each other, are integers comprised between 1 and 3;

$R_1$ is selected from H and a group of formula (III)




(III)

wherein

G is selected from H and P- $(CH_2)_l$ - $(W)_f$ - J, wherein

P is selected from the group consisting of O, $CH_2$, $CO_2$, NHCONH and CONH;

l is an integer comprised between 0 and 5;

W is selected from the group consisting of O, $CO_2$, CONH and NHCONH;

f is selected from between 0 and 1;

J is H or an alkyl group $(CH_2)_q$-$CH_3$, wherein q is an integer comprised between 0 and 20;

$R_2$ and $R_3$, equal or different from each other, are selected from between R and $R_1$, wherein R and $R_1$ are defined as above,

M is chosen from 2H and a metal selected from the group consisting of Zn, Mg, Pt, Pd, $Si(OR_7)_2$, $Ge(OR_7)_2$ and $AlOR_7$, wherein $R_7$ is chosen from between H and C1-C15 alkyl,

and pharmaceutically acceptable salts thereof,

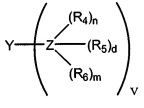
with the exception of the following compounds:

a) compound of formula (I) wherein M is 2H, $R_1 = R_3 = H$, $R = R_2$ is a group of formula (II) in which s is 1, X is O, Y is $(CH_2)_3$, v is 1, Z is N, n = d = 1, m is 0, and $R_4 = R_5 = H$; and
b) compound of formula (I) wherein M is 2H, $R_1 = R_3 = H$, $R = R_2$ is a group of formula (II) in which s is 1, X is O, Y is $(CH_2)_3$, v is 1, Z is N, n = d = 1, m is 0, $R_4$ and $R_5$ form with Z a phthalimido group, wherein the compounds are effective for the treatment of at least one of: infectious diseases of viral, fungine and bacterial origin, diseases characterized by cellular hyperproliferation, and dermatological diseases upon irradiation with light of appropriate wavelength.

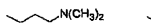
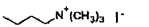
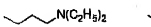
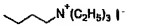
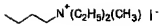
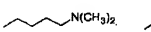
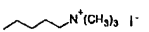
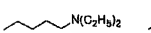
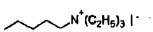
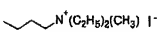
2. (Original) Compounds of general formula (I) according to claim 1, in which the said group R comprises at least one substituent bearing tertiary or quaternary nitrogen.

3. (Cancelled)

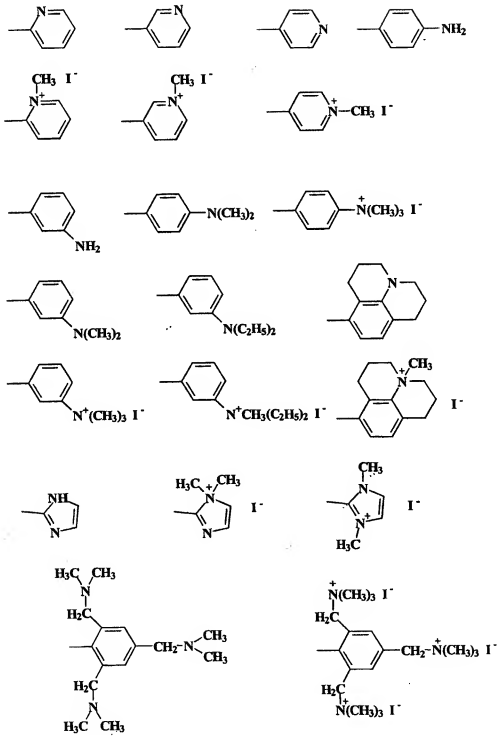
4. (Original) Compounds of general formula (I) according to claim 1, wherein the group

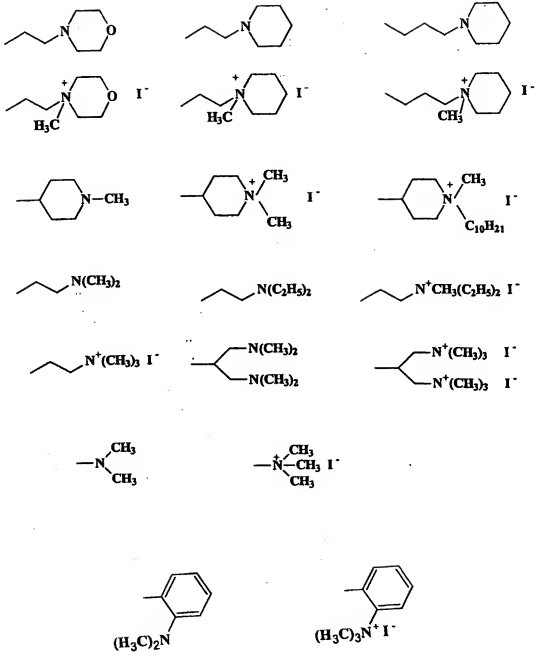


is selected from the group consisting of:







5. (Original) Compounds of general formula (I) according to claim 1, selected from the group consisting of:5,10,15-tris-[4-(2-N,N,N-trimethylammoniumethoxy)-phenyl]-20-[(4-decyloxy)-phenyl] porphyrin triiodide,
5,10,15-tris-[4-(2-N,N,N-trimethylammoniumethoxy)-phenyl]-20-[(4-decyloxy)-phenyl]porphyrinate zinc (II) triiodide,
5,10,15-tris-[4-(2-N,N-dimethylaminoethoxy)phenyl]-20-[(4-decyloxy)phenyl] porphyrin],
5,10,15-tris-[4-(2-N,N-dimethylaminoethoxy)-phenyl]-20-[(4-decyloxy)phenyl] porphyrinate zinc (II),
5,10,15-tris-{[4-(N-methylpiperidin-4-yl)oxy]phenyl}-20-[(4-decyloxy)phenyl] porphyrin,
5,10,15-tris-{[4-(N,N-dimethylpiperidin-4-ium)oxy]phenyl}-20-[(4-decyloxy)phenyl] porphyrin triiodide,
5,10,15-tris-[3-(2-morpholin-4-ylethoxy)phenyl]-20-[(4-decyloxy)phenyl]porphyrin,
5,10,15-tris-{[3-(2-methylmorpholin-4-ium)ethoxy]phenyl}-20-[(4-decyloxy)phenyl] porphyrin triiodide,
5,10,15-tris-{4-[4-(N,N-dimethylamino)phenoxy]phenyl}-20-[(4-decyloxy)phenyl] porphyrin,
5,10,15-tris-{4-[4-(N,N,N-trimethylammonium)phenoxy]phenyl}-20-[(4-decyloxy)phenyl] porphyrin triiodide,
5,10,15-tris-{4-[3-(N,N-dimethylamino)phenyl]thiophenyl}-20-[(3-undecyloxy) phenyl] porphyrin,
5,10,15-tris-{4-[3-(N,N,N-trimethylammonium)phenyl]thiophenyl}-20-[(4-undecyloxy) phenyl]porphyrin triiodide,
5,10,15-tris-[3-(3-N,N-dimethylaminopropoxy)phenyl]-20-[(3-undecyloxy) phenyl] porphyrin,
5,10,15-tris-[3-(3-N,N,N-trimethylammoniumpropoxy)phenyl]-20-[(3-undecyloxy) phenyl] porphyrin triiodide,
5,10,15-tris-{4-[4-(N,N-dimethylamino)butoxy]phenyl]-20-[(4-undecyloxy) phenyl] porphyrin,
5,10,15-tris-{4-[4-(N,N,N-trimethylammonium)butoxy]phenyl}-20-[(4-undecyloxy) phenyl]porphyrin triiodide,
5-{4-{2,4,6-tris-[(dimethylamino)methyl]phenoxy}phenyl}-10,15,20-tris-[(4-decyloxy) phenyl] porphyrin,

5-{4-{2,4,6-tris-[(trimethylammonium)methyl]phenoxy}phenyl}-10,15,20-tris-[(4-decyloxy) phenyl]porphyrin triiodide,

5-{3-[2-(dimethylamino)]-1-{[(dimethylamino)methyl]ethoxy}phenyl}-10,15,20-tris-[(3-decyloxy)phenyl]porphyrin,

5-{3-[2-(trimethylammonium)]-1-{[(trimethylammonium)methyl]ethoxy} phenyl}-10,15,20-tris-[(3-decyloxy)phenyl]porphyrin diiodide,

5,10,15-tris-{4-[3-(diethylamino)propoxy]phenyl}-20-[(4-decyloxy)phenyl] porphyrin,

5,10,15-tris-{4-[3-(trimethylammonium)propoxy]phenyl}-20-[(4-decyloxy)phenyl] porphyrin triiodide,

5,10,15-tris-[4-(2-aminoethoxy)phenyl]-20-[(4-decyloxy)phenyl] porphyrin,

5,10,15-tris-{[4-(2-trimethylammonium)ethoxy]phenyl}-20-[(4-decyloxy) phenyl] porphyrin triiodide,

5,10,15-tris-{{[4-(N,N,N-trimethylammonium)phenoxy]carbonyl}phenyl}-20-[(4-decyloxy) phenyl]porphyrin triiodide,

5-{4-{{2-(trimethylammonium)-1-[(trimethylammonium)methyl]ethoxy} carbonyl}phenyl}-10,15,20-tris-[(3-decyloxy)phenyl]porphyrin diiodide,

5,15-bis-[3-(3-N,N,N-trimethylammoniumpropoxy)phenyl] porphyrin diiodide,

5,15-bis-[4-(2-piperidin-1-ylethoxy)phenyl]porphyrin,

5,15-bis-[4-(2-N-methylpiperidin-1-iumethoxy)phenyl]porphyrin diiodide,

5,15-bis-[4-(3-N,N-dimethylaminopropoxy)phenyl]-10,20-bis-[(3-decyloxy)phenyl]porphyrin,

5,15-bis-[4-[3-N,N,N-trimethylammoniumpropoxy)phenyl]-10,20-bis-[(3-decyloxy)phenyl]porphyrin diiodide,

5,15-bis 4-{[2-(N,N-dimethylamino)ethylthio]phenyl}porphyrin,

5,15-bis-{4-[2-(N,N,N-trimethylammonium)ethylthio]phenyl}porphyrin diiodide,

5,15-bis-{4-{2-[3-(trimethylammonium)phenoxy]ethoxy}phenyl}porphyrin diiodide,

5,15-bis-{4-{2-[3-(N,N,N-trimethylammonium)phenyl]-2-oxoethyl}-10,20-bis-[(3-decyloxy)phenyl]porphyrin diiodide,

5,15-bis-[3-(3-N,N,N-trimethylammoniumpropoxy)phenyl]porphyrinate zinc(II) diiodide,

5,15-bis-[3-(3-N,N-dimethylaminopropoxy)phenyl]porphyrinate zinc(II),

5,15-bis-[4-(4-N,N,N-trimethylammoniumphenoxy)phenyl] porphyrin diiodide,
5,15-bis-[4-(4-aminophenoxy)phenyl]porphyrin,
5,15-bis-[3-(4-N,N-dimethylaminophenoxy)phenyl]porphyrin,
5,15-bis-[3-(4-N,N,N-trimethylammoniumphenoxy)phenyl]porphyrin diiiodide,
5,15-bis-[3-(4-N,N-dimethylaminophenyl)thiophenyl]porphyrin,
5,15-bis-[3-(4-N,N,N-trimethylammoniumthiophenoxy)phenyl]porphyrin diiiodide,
5,15-bis-4-[3-(N,N-dimethylaminophenoxy)phenyl]-10,20-bis-[(4-decyloxy) phenyl]porphyrin,
5,15-bis-4-[3-(N,N,N-trimethylammoniumphenoxy)phenyl]-10,20-bis-[(4-decyloxy) phenyl]porphyrin diiodide,
5,10,15-tris-{4-[4-(N,N-dimethylamino)butoxy]phenyl}-20-[(4-undecyloxy)phenyl] porphyrinate zinc(II),
5,10,15-tris-{4-[4-(N,N,N-trimethylammonium)butoxy]phenyl}-20-[(4-undecyloxy) phenyl]porphyrinate zinc(II) triiodide,
5,15-bis-[4-(2-piperidin-1-ylethoxy)phenyl]porphyrinate zinc(II), and
5,15-bis-[4-(2-N-methylpiperidin-1-iumethoxy)phenyl]porphyrinate zinc(II) diiodide.

6. (Previously Presented) Conjugates of compounds of general formula (I) as defined in claim 1 with a macromolecule selected from the group consisting of amino acids, polypeptides, proteins and polysaccharides.

7. (Previously Presented) Process for the preparation of compounds of formula (I) in which $R = R_2 = R_3$ as defined in claim 1, selected from the group consisting of:
- pre-functionalization of suitable reagents with amino groups, followed by statistical synthesis of the porphyrin ring, possible modification of the amino groups in ammonium groups, and possible complexation with the metal cation if the metal complex is required;
- statistical synthesis with formation of the porphyrin ring followed by functionalization of the porphyrin with the present amino or ammonium groups, and possible complexation with the metal cation; and

- synthesis of the porphyrin ring through suitable dipyrromethane derivatives followed by functionalisation of the porphyrin with the present amino or ammonium groups, and possible complexation with the metal cation.

8. (Previously Presented) Process for the preparation of compounds of formula (I) in which $R = R_2$ and $R_1 = R_3$ as defined in claim 1, comprising the synthesis of the porphyrin ring through dipyrromethane followed by functionalisation of the porphyrin with aliphatic or aromatic amino or ammonium groups, and possible complexation with the metal cation if the metal complex is required.

9. (Previously Presented) Intermediate compounds in the preparation of compounds of formula (I) as defined in claim 1, selected from the group consisting of:
5,10,15-tris-[4-(2-hydroxyethoxy)phenyl]-20-[(4-decyloxy)phenyl]porphyrin,
5,10,15-tris-[4-(2-methylsulphonylethoxy)phenyl]-20-[(4-decyloxy)phenyl]porphyrin,
5,15-bis-[3-(3-hydroxypropoxy)phenyl]porphyrin,
5,15-bis-[3-(3-methylsulphonylpropoxy)phenyl]porphyrin,
5,15-bis-[3-(3-hydroxypropoxy)phenyl]porphyrinate zinc(II),
5,15-bis-[3-(3-methylsulphonylpropoxy)phenyl]porphyrinate zinc(II),
5,15-bis-{[3-(3-(4-methylphenyl)sulfonyl)oxy]propoxyphenyl}porphyrinate zinc(II),
5,15-bis-[3-(3-bromopropoxy)phenyl]porphyrinate zinc(II), and
5,15-bis-[4-(4-nitrophenoxy)phenyl]porphyrin.

10. (Currently Amended) Pharmaceutical compositions comprising as the active principle at least a compound of general formula (I) as defined in claim 1, or a conjugate as defined in claim 6, or mixtures thereof, ~~possibly~~ in combination with pharmaceutically acceptable excipients and/or diluents.

11- 14. (Canceled)

15. (Withdrawn) Diagnostic agents comprising as the active principle a compound of general formula (I) as defined in claim 1, or a conjugate thereof as defined in claim 6, possibly in combination with a pharmaceutically acceptable carrier.

16. (Withdrawn) Sterilizing agents comprising as the active principle a compound of general formula (I) as defined in claim 1, or a conjugate thereof as defined in claim 6, possibly in combination with a pharmaceutically acceptable carrier.

17 - 18. (Canceled)

19. (Original) Method of treating infectious diseases of viral, fungine and bacterial origin, diseases characterised by cellular hyperproliferation and dermatological diseases, comprising administering to a patient in need of such a treatment an effective amount of at least a compound of general formula (I) as defined in claim 1 or a conjugate thereof as defined in claim 6, and irradiating the pathologically affected tissues with light of appropriate wavelength.

20. (Original) Method according to claim 19, wherein the said affected tissues are irradiated by visible red light radiation when the treatment of deep seated tumours on infections is required, and by blue visible radiation or white light radiation when treating psoriasis, actinic keratosis, basal cell carcinomas and other cancerous and pre-cancerous lesions of the skin and mucosas.

21. (Withdrawn) Method of localising pathologically affected areas comprising administering to a patient an effective amount of at least a compound of general formula (I) as defined in claim 1 or a conjugate thereof as defined in claim 6, and irradiating the pathologically affected areas with light of appropriate wavelength.

22. (Withdrawn) Method for the *in vitro* sterilization of blood and blood derivatives, comprising adding to blood and blood derivatives in need of such a treatment a compound of

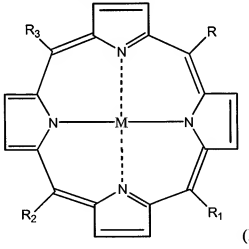
general formula (I) as defined in claim 1, or a conjugate thereof as defined in claim 6, and thereafter irradiating with light of appropriate wavelength.

23. (Previously Presented) Method of sterilizing wounds, comprising administering to a patient in need of such a treatment an effective amount of at least a compound of general formula (I) as defined in claim 1 or a conjugate thereof as defined in claim 6, and thereafter irradiating with light of appropriate wavelength.

24. (Previously Presented) Method according to claim 19, wherein said diseases characterised by cellular hyperproliferation are selected from the group consisting of psoriasis, intimal hyperplasia, benign prostate hyperplasia and atheromas.

25. (New) Compounds of general formula (I) according to claim 1, wherein $R_6$ is selected from aliphatic groups, linear or branched, saturated or unsaturated, having from 1 to 5 carbon atoms, substituted with alkylamine or alkylammonium groups having alkyl chains comprising from 1 to 5 carbon atoms.

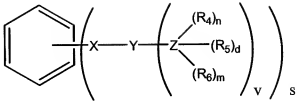
26. (New) Compounds of general formula (I)




(I)

wherein

R is the following group of formula (II)



(II)

wherein

X is selected from the group consisting of O, S, $CH_2$, COO, $CH_2CO$, $O(CH_2)_2O$, $O(CH_2)_3O$ and N;

Z is selected from between N and $CH_2N$;

Y is selected from aliphatic groups, linear or branched, saturated or unsaturated, having from 1 to 10 carbon atoms, and phenyl or Y forms with Z a pyridine or substituted pyridine heterocycle;

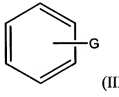
$R_4$ and $R_5$, equal or different from each other, are selected from H and alkyl groups having from 1 to 3 carbon atoms, or they form with the Z group a pyridine or substituted pyridine heterocycle;

$R_6$ is selected from H and aliphatic groups, linear or branched, saturated or unsaturated, having from 1 to 5 carbon atoms, or comprising a saturated heterocycle selected from the group consisting of: morpholine, piperidine, piperazine, pyrrolidine, and substituted forms thereof;

d, m, and n, equal of different from each other, are selected from 0 and 1;

v and s, equal or different from each other, are integers comprised between 1 and 3;

$R_1$ is selected from H and a group of formula (III)



(III)

wherein

G is selected from H and P- $(CH_2)_l$ - $(W)_f$ - J, wherein

P is selected from the group consisting of O, $CH_2$, $CO_2$, NHCONH and CONH;

l is an integer comprised between 0 and 5;

W is selected from the group consisting of O, $CO_2$, CONH and NHCONH;

f is selected from between 0 and 1;

J is H or an alkyl group $(CH_2)_q$-$CH_3$, wherein q is an integer comprised between 0 and 20;

$R_2$ and $R_3$, equal or different from each other, are selected from between R and $R_1$, wherein R and $R_1$ are defined as above,

M is chosen from 2H and a metal selected from the group consisting of Zn, Mg, Pt, Pd, $Si(OR_7)_2$, $Ge(OR_7)_2$ and $AlOR_7$, wherein $R_7$ is chosen from between H and C1-C15 alkyl,

and pharmaceutically acceptable salts thereof,

with the exception of the following compounds:

a) compound of formula (I) wherein M is 2H, $R_1 = R_3 = H$, $R = R_2$ is a group of formula (II) in which s is 1, X is O, Y is $(CH_2)_3$, v is 1, Z is N, n = d = 1, m is 0, and $R_4 = R_5 = H$; and

b) compound of formula (I) wherein M is 2H, $R_1 = R_3 = H$, $R = R_2$ is a group of formula (II) in which s is 1, X is O, Y is $(CH_2)_3$, v is 1, Z is N, n = d = 1, m is 0, $R_4$ and $R_5$ form with Z a phthalimido group, wherein the compounds are effective for the treatment of at least one of: infectious diseases of viral, fungine and bacterial origin, diseases characterised by cellular hyperproliferation, and dermatological diseases upon irradiation with light of appropriate wavelength.